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09/529,365	06/13/2000	CHRISTOPH ESPEY	225/48700	8003

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EXAMINER

FOX, JOHN C

ART UNIT PAPER NUMBER

3753

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 20

Serial Number: 09/529,365  
Filing Date: June 13, 2000  
Appellant(s): Christoph Espey

Vincent J. Sunderdick  
For Appellant

**MAILED**

**SEP - 3 2002**

**GROUP 3700**

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed  
August 26, 2002.

*(1) Real Party in Interest*

A statement identifying the real party in interest is  
contained in the brief.

*(2) Related Appeals and Interferences*

A statement identifying the related appeals and interferences  
which will directly affect or be directly affected by or have a  
bearing on the decision in the pending appeal is contained in the  
brief.

(3) *Status of claims.*

The statement of the status of claims contained in the brief is correct.

(4) *Status of Amendments After Final.*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of invention.*

The summary of invention contained in the brief is overly inclusive. Nothing in the claims relate to fuel injection, high or low pressure fluid or direction of flow through the valve. Claim 15 does not recite an electrically activated valve.

(6) *Issues.*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of claims.*

Appellant's brief includes a statement that claims 8-9, 15-16 and 22 do not stand or fall together and provides reasons as set forth in 37 C.F.R. § 1.192(c)(5) and (c)(6).

(8) *Claims appealed.*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of record.*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,405,088 Gordon et al April 11, 1995

(10) *New prior art.*

No new prior art has been applied in this examiner's answer.

(11) *Grounds of rejection.*

The following ground(s) of rejection are applicable to the appealed claims.

Claims 8-9, 15-16 and 22 are rejected under 35 USC §102(b) as being anticipated by Gordon et al. Gordon et al show a valve having stem, or shaft, 14, see column 2, lines 44-45, and include a guide bore 35 and an annular flow passage 37 between the guide bore and the valve head, see column 3, lines 5-7. Ring 19 of Gordon et al is fixed to head 16 and together they form the valve member. The contact area is defined by 17 and 18, and the sharp outer edge of 17 is the step. The sloping surface adjoining the edge is inherently a guide surface.

(12) *New ground of rejection.*

This Examiner's Answer does not contain any new ground of rejection.

(13) *Response to argument.*

Appellant argues that claims 8 and 15 recite an annular space, but claim 15 does not recite an annular space. As to claim 8, Appellant may be arguing that the claim language requires an annular space that extends from the valve guide to the end of the contact area. However, in the drawings such a space is not an annulus, but is, maybe, a stepped annulus or a composite of two annular spaces. The Examiner reads the last paragraph of claim 8 as requiring an annular space, requiring the space to include the contact area (of the head and seat) and requiring the space to be located somewhere between the guide and the end of the contact area. The annular space between valve head 17 and seat 18 of Gordon et al meets all three requirements, even when the guide is part 35 of Gordon et al.

In addition to guide 35 of Gordon et al, column 2, lines 13-17 of Gordon et al discloses that the portion of head 16 which protrudes into nozzle body 10 is "a piston valve 20 guided in a guide segment 23". Thus, the annular space between 17 and 18 extends from guide segment 23 to the end of the contact area.

Appellant argues that the contact area has a step and a guide surface disposed radially outward of the step and that Gordon et al do not show this. The Boards's attention is directed to the marked up copy of Figure 2 of Gordon et al attached to the Final Rejection, which shows the claimed features. It can be noted that the step of Gordon et al is radially outward of the opening formed by bore 23.

Appellant argues that in Gordon et al the valve is element 20. However, column 2, lines 8-13 disclose "a frustoconical valve cone 17" that "cooperates with a valve seat 18 in the shape of a hollow cone". Column 3, lines 26-33 indicates that the valve cone 17 rests tightly on the valve seat 18 in the closed position.

Appellant argues that claim 15 distinguished over Gordon et al by the recitation of a spring. The Board's attention is directed to spring 40 of Gordon et al.

Appellant argues that Gordon et al do not show an "electrically activated" or "electrically actuated" valve, which is true. Claims 8 and 22 contain the word "electrically" in the preamble, but in the body of the claims an activating or activation device is positively recited and is not limited to an electrical device. The adjectival recitation in the preamble is thus considered to be suggestive or optional, but not limitative, and the claims are properly construed as reciting any activation device, including a hydraulic activation device as taught in Gordon et al.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



JOHN FOX  
PRIMARY EXAMINER  
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jcf  
September 1, 2002

Conferee



A. MICHAEL CHAMBERS  
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